

(12) **UK Patent Application** (19) **GB** (11) **2 176 226 A**

(43) Application published 17 Dec 1986

(21) Application No 8613505

(22) Date of filing 4 Jun 1986

(30) Priority data

(31) 8514127  
8514805  
8607893

(32) 5 Jun 1985  
11 Jun 1985  
1 Apr. 1986

(33) GB

(51) INT CL<sup>4</sup>

E06B 9/386

(52) Domestic classification (Edition H):

E1J CB

(56) Documents cited

None

(58) Field of search

E1J

Selected US specifications from IPC sub-class E06B

(71) Applicant

Stephen French,  
4 Johnston's Lane, Dundee DD1 5ET, Scotland

(72) Inventor

Stephen French

(74) Agent and/or Address for Service

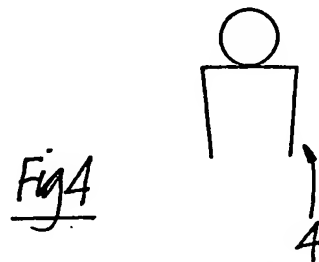
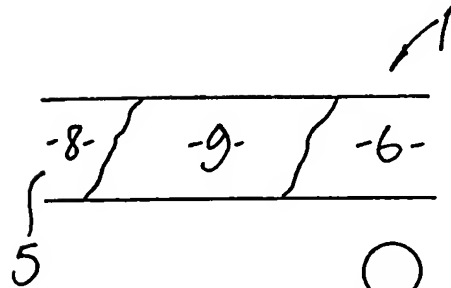
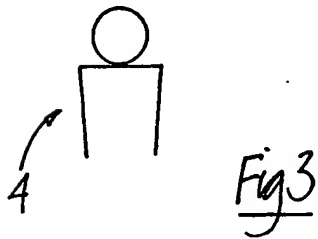
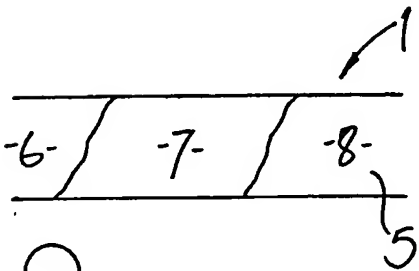
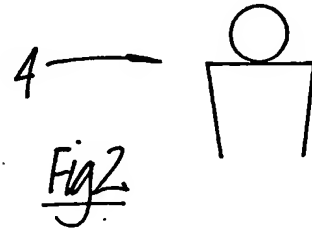
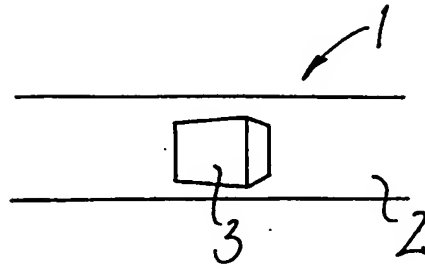
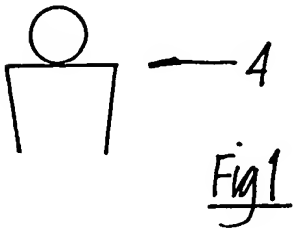
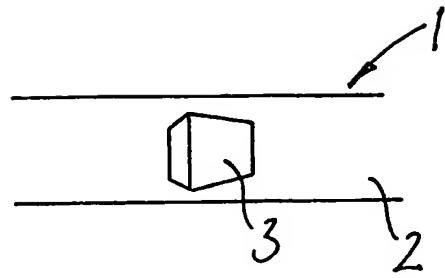
Murgitroyd and Company,  
49 Bath St, Glasgow G2 2DL

(54) **Venetian blind**

(57) A venetian blind has an embossed metallised PV foil adhered to the exposed surface of one of its slats, the foil being subjected to irradiation by laser.

GB 2 176 226 A

2176226



## SPECIFICATION

## Venetian blind

- 5 This invention relates to a venetian blind.

Venetian blinds are a very popular form of window screening and the slats are generally uniformly coloured. They may be held horizontally between suspension cords, or may be free-hanging from an upper support.

- 10 According to the present invention there is provided a venetian blind having a series of generally parallel slats of which at least one has a surface of light-diffracting material.
- 15 The light-diffracting material may be for example holographic material which produces a three-dimensional image when viewed, and can be made by means of laser irradiation of film or foil. Such film or foil may be applied to
- 20 a substrate forming the basic slat for the blind by means of adhesive, hot stamping or other techniques. Alternatively the slat itself may have its surface adapted to be light-diffracting.

- 25 Metallised foil is a suitable means for producing the light-diffracting property, and embossed metallised foils can show diffracted colour-change or three-dimensional holographic imagery; such effects rely on diffraction embossing, and may be produced using polyvinyl chloride or other vinyl material, polyester or other plastics substrates.

The slats of the blind are preferably vertical or horizontal in use, although they may be arranged at an inclined angle if desired.

- 35 Embodiments of the invention will now be described by way of example with reference to the accompanying drawings, in which:

- 40 *Figure 1* is a front view of a portion of a slat of a blind of this invention, with an image graphically represented and showing a first position of a viewer;

*Figure 2* is a view corresponding to *Fig. 1* showing the effect of a change in the position of the viewer;

- 45 *Figure 3* is a view corresponding to *Fig. 1* of a slat of an alternative blind of this invention; and

*Figure 4* is a view corresponding to *Fig. 2* of the slat of the blind of *Fig. 3*.

- 50 Referring first to *Figs. 1* and *2*, a venetian blind of this embodiment of the invention has an embossed metallised PVC foil 2 adhered to the exposed surface of one of its slats 1, the foil 2 being subjected to irradiation by laser.

- 55 This produces on the foil 2 an image 3 which appears to a viewer 4 to be three-dimensional. As a result, when the viewer 4 moves position, as between *Figs. 1* and *2*, the image 3 appears in a different attitude. A number of
- 60 different or similar images can be produced along the slat 1, and also on other slats forming the composite blind.

- Referring now to *Figs. 3* and *4*, a different effect is produced by adhering to the surface
- 65 of the slat 1 a film 5 of diffraction-embossed

metallised polyester. In this case the film 5 diffracts incident light and produces for the viewer 4 in the position shown in *Fig. 3* a series of colours along the slat 1 in the order red 6, orange 7 and yellow 8. When the viewer moves to the position shown in *Fig. 4* the colours produced by diffraction from the film 5 are different, namely yellow 8, green 9 and red 6.

- 70 By providing blinds having slats as described above, very attractive and interesting effects can be produced by diffraction, and adjacent slats can be arranged to show interacting or complementary effects.
- 80 Modifications and improvements may be made without departing from the scope of the invention.

## CLAIMS

- 85 1. A venetian blind having a series of generally parallel slats of which at least one has a surface of light diffracting material.
2. A venetian blind as claimed in Claim 1 wherein the light diffracting material is a holographic material.
- 90 3. A venetian blind as claimed in Claim 2 wherein the holographic material is a laser irradiated foil.
4. A venetian blind as claimed in Claim 2 wherein the holographic material is an embossed metallised foil.
- 95 5. A venetian blind as claimed in Claim 2, 3 or 4 wherein the holographic material is affixed to a substrate forming the basic slats for the blind.
- 100 6. A venetian blind as claimed in Claim 2, 3 or 4 wherein the holographic material forms the basic slats for the blind.
7. A venetian blind as claimed in Claim 5 wherein the substrate is formed from a plastics material.
- 105 8. A venetian blind substantially as herein before described with reference to the accompanying drawings.

Printed in the United Kingdom for  
Her Majesty's Stationery Office, Dd 8818935, 1986, 4235.  
Published at The Patent Office, 25 Southampton Buildings,  
London, WC2A 1AY, from which copies may be obtained.